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**Vogt**

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(54) **DEVICE FOR ADJUSTING AN OPTICAL APPARATUS**

5,230,490 A \* 7/1993 Sloop ..... 396/419  
5,737,657 A \* 4/1998 Paddock et al. .... 396/428

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\* cited by examiner

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(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(57) **ABSTRACT**

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The apparatus has a first and a second member (5,6) and a device (7) for the fixing of a guide rail (1) with an optical apparatus to the members. The device (7) contains a blocking member (8) and a lever (9) with a holding device (10) standing under spring action, the lever being pivotally mounted on the blocking member and contacting the second member (6) in such a way that the lever fixes the optical apparatus in a first position, frees the optical apparatus for displacement in a second position and releases the optical apparatus for removal in a third position.

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(52) **U.S. Cl.** ..... **396/419; 396/428**

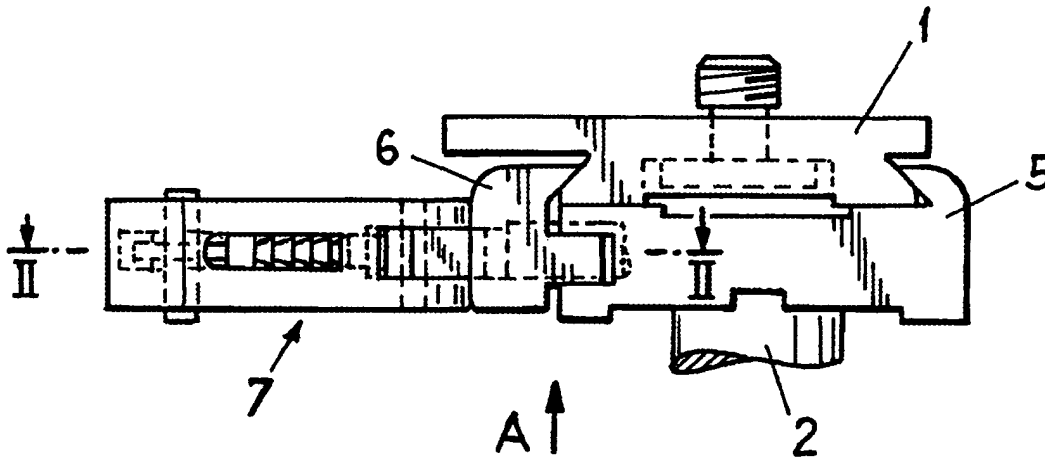
(58) **Field of Search** ..... **396/419, 428**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,824,504 A \* 2/1958 Bethmann ..... 396/419

**3 Claims, 2 Drawing Sheets**



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